

We have used a variable x-ray source to calibrate the response of FPIX readout chips. The source was made by Amersham (code AMC.2084). The primary source is a 10mCi americium-241 source. This source illuminates one of six metal foils, which fluoresce in the x-ray region, as shown in the table below:

Target	Energy (keV)		Photon Yield
Selected	K_alpha	K_beta	(#/sec/steradian)
Cu	8.04	8.91	2,500
Rb	13.37	14.97	8,800
Mo	17.44	19.63	24,000
Ag	22.10	24.99	38,000
Ba	32.06	36.55	46,000
Tb	44.23	50.65	76,000

As a reminder, the K lines are transitions to N=1 & the L lines are transitions to N=2.

K_alpha is N=2 to N=1 (K_alpha1 is 2P_{3/2} to 1S_{1/2}; K_alpha2 is 2P_{1/2} to 1S_{1/2}).

K_beta is N=3 to N=1.

K_gamma is N=4 to N=1.

L_alpha is N=3 to N=2.

L_beta is N=4 to N=2.

L_gamma is N=5 to N=2.